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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,083	08/02/2001	Vladimir Leonov	01P14199US	6776

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Siemens Corporation  
Intellectual Property Department  
186 Wood Avenue South  
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EXAMINER

GONZALEZ, JULIO C

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 06/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary****Application No.**

09/921,083

**Applicant(s)**

LEONOV, VLADIMIR

**Examiner**

Julio C. Gonzalez

**Art Unit**

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b)

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 March 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 and 21-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.                      6) ☐ Other:

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: shaft 84, first section member 102 and third sectioned member 192. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: in figure 1, reference number 26'. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "14" has been used to designate both elongated portion (page 2) and axial portion (page 1); reference character "43" has been used to

designate both end of conductor 40 and radial portion (page 15); reference character "46" has been used to designate both groove (page 15) and conductor channel; reference character "44" has been used to designate both second sectioned member and groove (page 15, line 1); reference character "163" has been used to designate both radial portion and axial portion; reference character "166" has been used to designate both second sectioned conductor and bore (page 17). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 11-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 discloses that the sectioned conductors are "adapted to" accommodate stress forces. What is meant by "adapted to"? In what way are the sectioned conductors able to adapt? Also the claims disclose that the sectioned member

move "relative" to each other. How is this "relative" move? How much do they move? The claim also discloses that the stress forces are accommodated. How are the forces accommodated? From the prior art, it may seem as if the element having portions 14 and 16 would be able also to accommodate stress forces since the rotor would move and eventually the portions 14 and 16 would "relative" move and thus accommodate forces. How is claim 1, as disclosed, different from the prior art?

In claim 13, it is disclosed that one elastic conductor connects both sectioned members. It may seem as if this elastic conductor is the same as the spring disclosed in claim 14 since the specifications in page 12 and page 13, lines 7-11, 25-30 disclosed that the elastic conductor is part of the spring. Is the elastic member a different device than the spring 50? Or are both the same device?

In order to advance prosecution in the merits, the Prior Art will be applied as best understood by the examiner.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over disclosure of present application of prior art (mainly figure 1) and Anderson.

The prior art discloses a sectioned conductor having a first sectioned member 14 and a second sectioned member 16 which are electrically connected to each other and it is provided a conductive path between a rotor coil 28' and a radial stud 32'. Moreover, the prior art teaches inherently that both of the sectioned members will "relative" move since if both sectioned members would be rigid, any movement of the rotor would break them and thus electrical connection would be lost. There must be some relative bending of the sectioned members in order to compensate for any movement due to stress forces.

However, the prior art does not disclose explicitly how sectioned members may moved.

On the other hand, Anderson discloses for the purpose of improving the construction of electrical machines that sectioned members "T" may move relative to the connections "R, R', R<sup>2</sup>, S, S', S<sup>2</sup>" (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a sectioned conductor as disclosed by the disclosure of the present application in the prior art and to modify the invention by

showing explicitly that sectioned members may move relative for the purpose of improving the construction of electrical machines as disclosed by Anderson.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prior art and Anderson as applied to claim 11 above, and further in view of Challita et al.

The combined sectioned conductor discloses all of the elements above. However, the combined sectioned conductor does not disclose that the section members are spaced apart.

On the other hand, Challita et al discloses for the purpose of providing an electrical machine that has brushes and collectors with a low value of resistivity thus making more efficient, that first sectioned members 72 and second sectioned members are spaced apart (see figure 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined sectioned conductor as disclosed above and to modify the invention by having the sectioned members apart for the purpose of providing an electrical machine that has brushes and collectors with a low value of resistivity thus making more efficient as disclosed by Challita et al.

9. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art, Anderson and Challita et al as applied to claim 12 above, and further in view of Thompson.

The combined sectioned conductor discloses all of the elements above. However, the combined sectioned conductor does not disclose that the section members are electrically connected by a spring/elastic member.

On the other hand, Thompson discloses for the purpose of making a commutator assembly that has cost and manufacturing advantages by maintaining the commutator bars in their correct positions, a spring 24 which connects that first sectioned member 20 and the second sectioned member 25 (see figure 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined sectioned conductor as disclosed above and to modify the invention by having a spring connected between the sectioned members for the purpose of making a commutator assembly that has cost and manufacturing advantages by maintaining the commutator bars in their correct positions as disclosed by Thompson.



*Allowable Subject Matter*

10. Claims 16-20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Jcg



June 19, 2003